

Chapter 3

The Housing Market in Major Dutch Cities



Rob Nijskens and Melanie Lohuis

1 Introduction

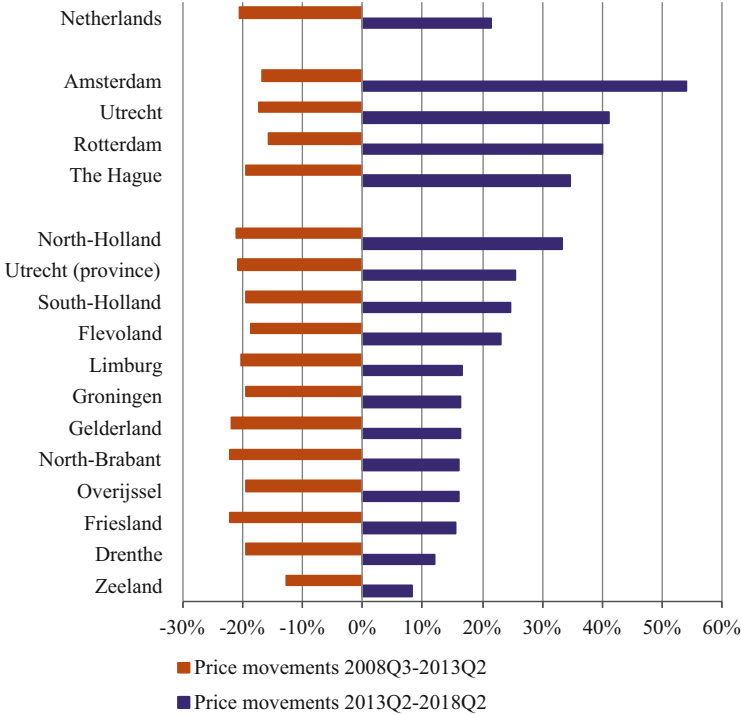
The Dutch housing market is recovering strongly from the crisis, with major cities leading the housing price growth. Prices have risen by over 25% since the post-crisis low in 2013 and have returned to their 2008 record levels. Annual transaction volume has increased from 100,000 in 2013 to over 240,000 in 2017. Figure 3.1 shows that house prices in the four major cities have recovered more strongly than in the rest of the country, and were on average already 22% above pre-crisis levels at the beginning of 2018. Transaction volumes also recovered more quickly in the cities. Recently, these developments have been spilling over to regions surrounding major cities (DNB 2018).

A similar pattern, of faster price increases in major cities than in the rest of the country, can be seen abroad. In fact, prices in some foreign cities have risen even faster over the past 3 years than in Dutch major cities (Fig. 3.2). In Canada, for instance, house prices have appreciated by 9% nationwide versus 15% per year on average in Vancouver. For China the difference is even larger: house prices rose by 6.5% in the whole country, but 15% in Beijing. The United Kingdom demonstrates spillover effects, as house price growth outside London has caught up and is now even higher than in the British capital.

This chapter asks why prices have risen so rapidly in the four major Dutch cities and what consequences this may entail for financial stability. We investigate whether

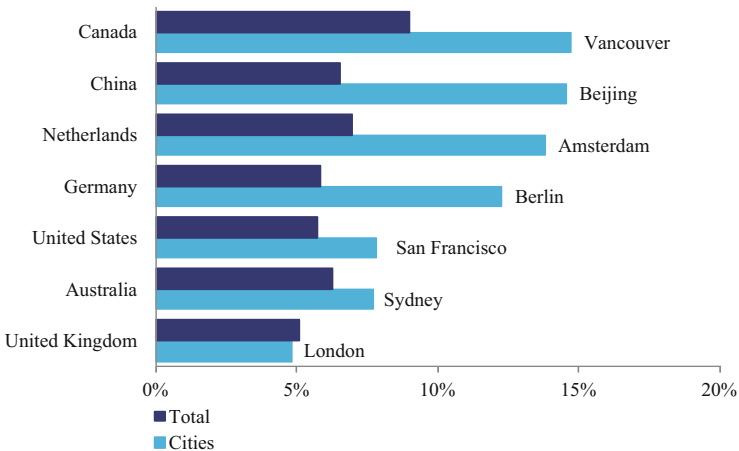
The views presented in this chapter are those of the authors and do not necessarily represent the views of De Nederlandsche Bank. This chapter is based on M. Hekwolter of Hekhuis, R. Nijskens and W. Heeringa (2017), The housing market in major Dutch cities, *DNB Occasional Study, 15-1* and DNB (2018), *Financial Stability Report*, Spring.

R. Nijskens (✉) · M. Lohuis
De Nederlandsche Bank, Amsterdam, The Netherlands
e-mail: r.g.m.nijskens@dnb.nl; m.s.lohuis@dnb.nl



Source: Statistics Netherlands (2016)

Fig. 3.1 Dutch regional house prices since the previous peak (Percentage change from 2008 levels). Note: The price movements in this chart are shown in percentages of the 2008 level to enable a fair comparison between the two periods considered



Source: National statistical offices (between 2018Q1 and 2018Q2)

Fig. 3.2 House price increases in selected cities and countries (Three-year average annual growth rate). Note: The last reference period is 2018Q2 for all countries except Australia (2018Q1)

a credit-driven bubble is forming in the cities and analyze differences between cities and the rest of the Netherlands in the mismatch of demand and supply. Then, we will set out the consequences that rising prices can have for the position of middle-income earners and the differences between renters and buyers. The chapter ends with some policy recommendations.

2 Price Movements in Major Urban Housing Markets Dissected

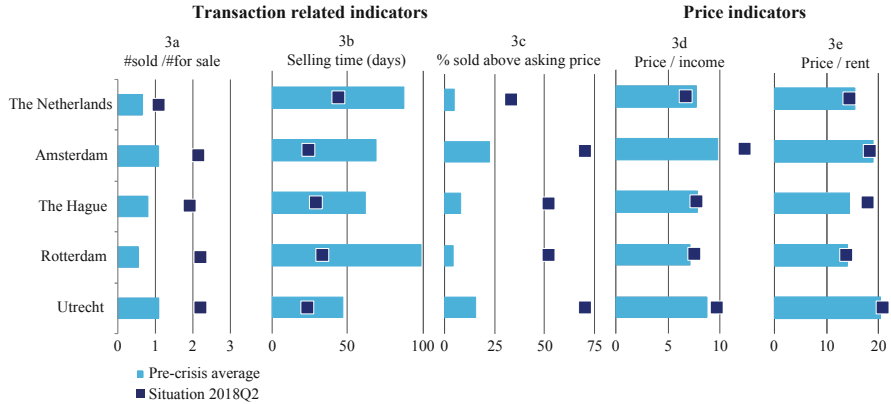
2.1 *Signs of Overheating in Major Urban Housing Markets*

Price-to-income and price-to-rent ratios are commonly used to measure price movements and the degree of overheating (ECB 2011, 2015; ESRB 2015; IMF 2016). The price-to-income ratio is a benchmark for affordability: if house prices rise faster than incomes, owner-occupied properties will, given interest rates, become less affordable. The price-to-rent ratio is, at a given interest rate level, a benchmark for the degree of equilibrium between owner-occupied and rental housing. This equilibrium should be achieved through arbitrage: if house prices rise much more sharply than rents, potential house buyers will be inclined to rent instead of buy.¹

Alongside price benchmarks, transaction-related indicators can thus help to determine the degree of overheating. Overheating stems from increasing scarcity in the housing market: when more properties are sold than come on the market, supply shrinks, potential house buyers have less choice and the market tightens. This drives up prices. Another factor is the time it takes to sell a house: quickening house sales could point to overheating. Finally, when selling prices are structurally higher than asking prices, this may indicate the market is overheating.

Figure 3.3 shows that major urban housing markets are indeed showing signs of overheating. The housing market in the major cities is a real seller's market: demand is surging ahead of supply. In all major cities, the ratio between the transaction volume and the number of houses listed for sale in a quarter greatly exceeds the pre-crisis average (Chart 3a). Moreover, the time it takes to sell a property has more than halved compared to the pre-crisis average (Chart 3b). In other words, the housing market in the cities has become a lot tighter: the number of homes for sale in the cities is now 65% lower than in 2007–2008. In the Netherlands as a whole, there are 35% less homes for sale. In addition, far more houses are being sold above the asking price than just before the crisis: in Amsterdam and Utrecht, this amounts to nearly three

¹The effect of interest rates is not fully factored into these benchmarks. Interest rates influence both the price and the financing cost of housing: lower mortgage rates lead to higher house prices but lower financing costs. The price-to-income and price-to-rent ratios do include the impact of interest rates on prices, but not the effect on financing costs (Himmelberg et al. 2005). Our own calculations show, however, that in recent years financing costs have followed a similar pattern to the price-income ratio.



Source: Statistics Netherlands (2016), Dutch Real Estate Agents Association (NVM)

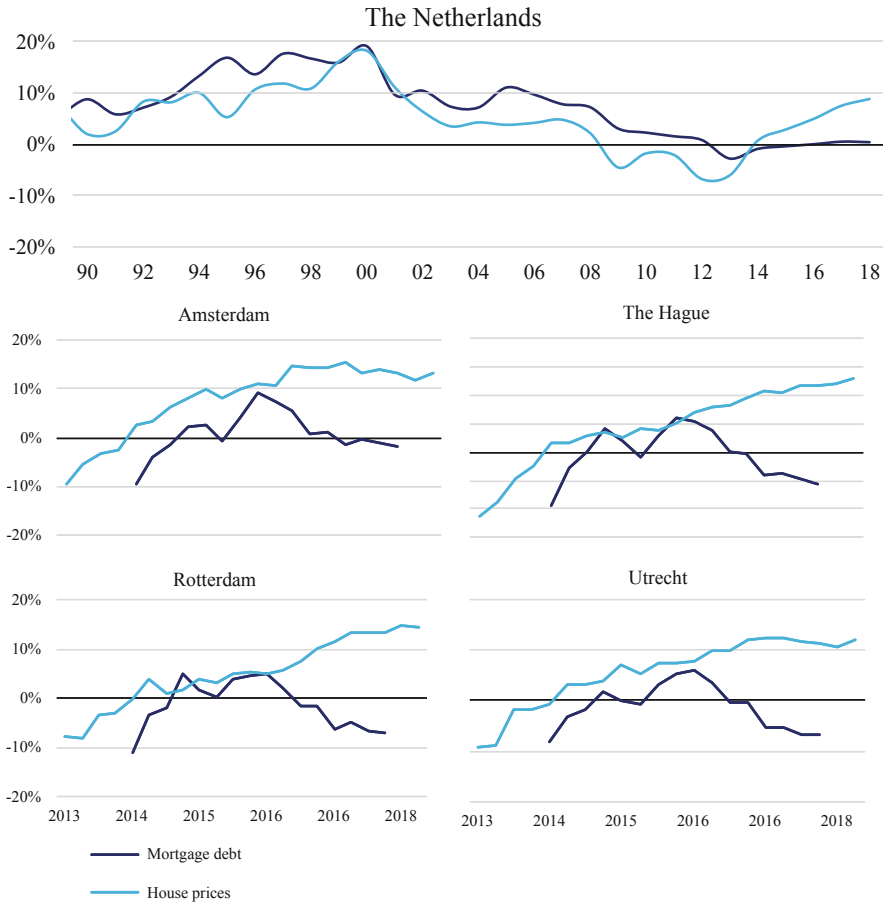
Fig. 3.3 Indicators for overheating in the Dutch housing market. Note: The prices for price/income (3d) and price/rent (3e) are for all existing owner-occupied properties, sold and unsold. Income is average disposable income. Asking and selling prices (3c) exclusively relate to sold properties. Rents (3e) relate to newly rented properties in the private sector. Average pre-crisis levels cover the periods 2007 Q1 to 2008 Q3 (house sales and supply, 3a, 3b), 2006 Q1 to 2008 Q3 (asking prices, 3c), 1995 Q1 to 2008 Q3 (price/income, 3d) and 2000 Q1 to 2008 Q3 (price/rent, 3e)

quarters of all transactions (Chart 3c). The housing market is also rapidly tightening in medium-sized cities such as Groningen and Eindhoven. In the rest of the Netherlands, houses are sold less quickly and less often above the asking price.

Price-to-income and price-to-rent ratios confirm this overheating, as they are both substantially above pre-crisis average in the major cities. This is particularly visible in Amsterdam and Utrecht (Charts 3d, 3e); this level has not yet been reached in the rest of the Netherlands. The sharp decline in mortgage rates is an important contributing factor here, and it suggests that prices of owner-occupied properties are rising faster than rents in the private rental sector.

2.2 As Yet no Indications of a Credit-Driven Bubble

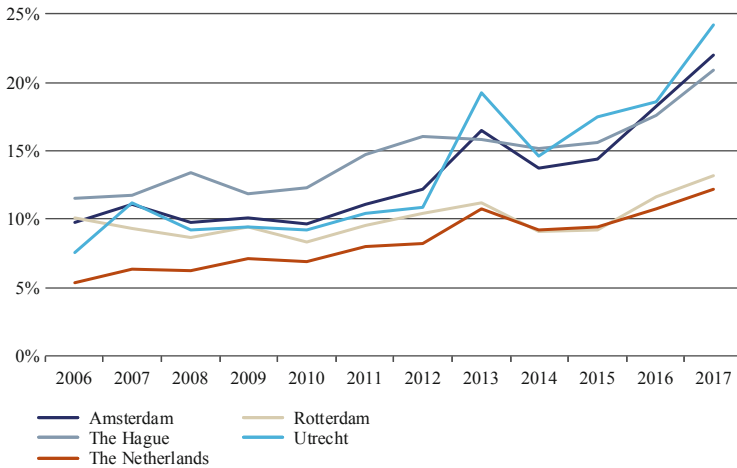
The traditionally strong link between mortgage lending growth and house prices is weakening in major cities. Figure 3.4 shows that overall Dutch mortgage debt has grown only very slightly since 2013. The four major cities initially see mortgage debt rising in tandem with house prices, but since early 2016 a divergence between the two can be noticed: house prices continue to climb while mortgage lending starts to slacken. One reason is the surge in voluntary repayments, which is an attractive option for home-owners because of low interest rates on savings. Accordingly, extra repayments since 2013 amounted EUR 70 billion. However, even when controlling for this factor, the picture of relentlessly rising house prices and limited mortgage growth in the major cities remains intact.



Source: DNB mortgage loan level data (2018), Statistics Netherlands (2016)

Fig. 3.4 Growth of mortgage debt and house prices. Note: The top part of the chart shows all Dutch household mortgages. The rest of the chart illustrates the picture for the four major cities based on some 90% of all mortgages extended by Dutch financial institutions

Another reason for the lower growth in mortgage credit is that more buyers in major cities are using own funds to help finance their home purchase. Land Registry figures indicate that house sales without an accompanying mortgage in the Netherlands have more than doubled from 8% in 2008 to nearly 17% in 2017. These non-mortgage sales are more common in the major cities. For instance, over a quarter of the transactions in Amsterdam since 2013 were financed without a mortgage at all. The relaxed tax exemption for gifts used for house down payments or mortgage repayments, which was in effect until the end of 2014 (and again since January 2017), has probably contributed to this trend. The number of first-time buyers who did not take out a mortgage peaked in December 2014, while tax records show that gifts made under the relaxed gift tax exemption topped EUR 10 billion in



Source: Kadaster

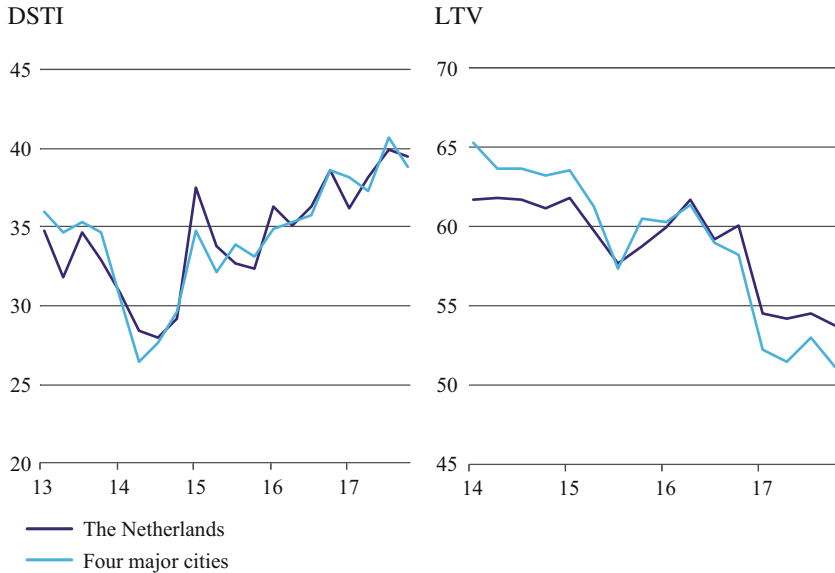
Fig. 3.5 Share of private investors in owner-occupied market (*Percentage of all private housing transactions*)

2013 and 2014. Low interest rates on savings, of course, are another persuasive reason for using personal or family savings to buy a house.

Moreover, the number of properties purchased for private rental, often without a mortgage, has recently increased in the major cities. A Land Registry study shows that since 2014 the share of private rental or buy-to-let transactions in the cities has risen steadily to over 20% (see Fig. 3.5). These transactions also account for a large part (43%) of all transactions without a mortgage. Investors see the buy-to-let market as an alternative to low returns on other investments. According to experts, both professional parties and smaller private investors are queuing up to enter the non-rent regulated rental sector in the cities. Private investor interest can help to expand the private rented segment, although it also means more competition for home-seekers in the owner-occupied market, driving up prices.

Despite the rising house prices, the share of households borrowing close to or at the maximum allowed is lower in the cities than in the rest of the Netherlands (Fig. 3.6). Indeed, the percentage of Dutch households borrowing more than 90% of the Debt-Service-to-Income (DSTI) limit² has been hovering between 35% and 40% for the past 2 years, and is not higher in the major cities. The average Loan-to-Value ratio (LTV) for new mortgages is even lower in cities: in Amsterdam and Utrecht, it lay around 90% in 2016 versus 95% nationwide, for instance. This is mainly due to the larger number of buyers with an LTV below 80%, confirming the earlier observation that home buyers in major cities are contributing more own funds.

²This limit is based on the financing costs standards of the National Institute for Family Finance Information (NIBUD).



Source: DNB mortgage loan level data (2018)

Fig. 3.6 Share of households borrowing more than 90% of their DSTI and share of households with an LTV above 90%. Note: The calculation of the financing costs standard in this chart takes into account income differences between house buyers and the decline in interest rates over that period. The LTV limit has been decreasing from 105 in 2013 to 100 in 2018. First-time buyers cannot be perfectly identified, but are approximated by looking at all new mortgage borrowers younger than 35. The four major cities are Amsterdam, The Hague, Rotterdam and Utrecht

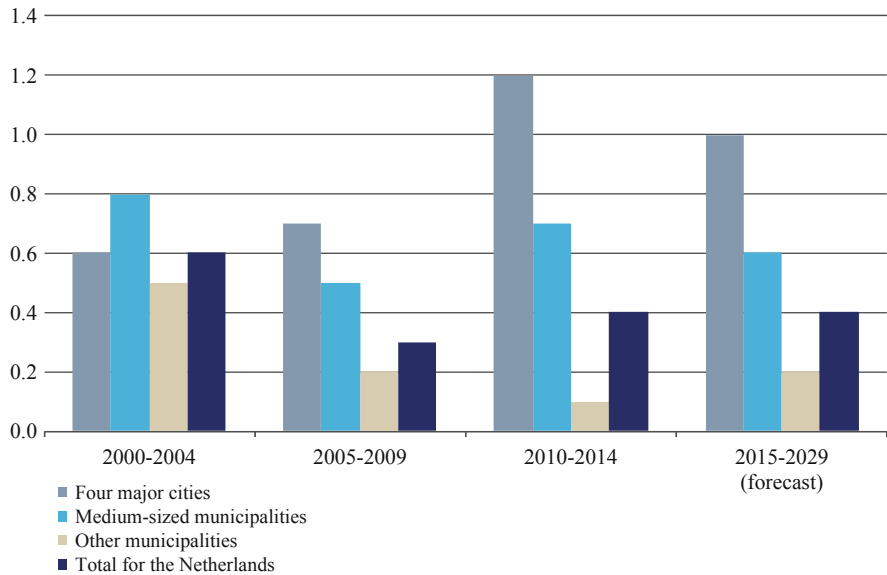
In sum, housing markets in major Dutch cities are showing signs of overheating, but there are no strong indications of a credit-driven bubble as of yet. Despite the tightening urban housing markets, credit indicators currently do not point to a credit-driven bubble. Even after adjusting for repayments, mortgage lending growth is limited and home-buyers are not borrowing closer to the maximum permitted amount than before. Interestingly, the LTV ratios in the cities are in fact lower than in the rest of the Netherlands. Therefore, it seems that price increases are mainly driven by the tightness in the housing market in the major cities.

3 Differences Between the Major Cities and the Rest of the Netherlands

3.1 Demand for Housing

Demand Drivers

An important factor driving housing demand in major cities is urbanisation, which is a strong international trend. In the past 25 years, the share of the population living in



Source: PBL Netherlands Environmental Assessment Agency/Statistics Netherlands regional population and household forecast (2016)

Fig. 3.7 Annual population growth (*Percentage growth per year*). Note: Municipal boundaries in effect in 2015. Four major cities: Amsterdam, Rotterdam, The Hague and Utrecht. Medium-sized municipalities: other municipalities with more than 100,000 inhabitants in 2015. Other municipalities: all other municipalities

urban areas has steadily grown all over the world. In the Netherlands too, the population in the four major cities has grown proportionately faster than in the rest of the country since 2005 (Fig. 3.7). And since 2010, the urban population growth rate has been nearly three times higher than the nationwide average (PBL Netherlands Environmental Assessment Agency/Statistics Netherlands 2016). Forecasts show that this trend will continue in the Netherlands. The large cities and medium-sized municipalities are expected to continue seeing the strongest population growth in the future (Fig. 3.7). At the same time the number of households, which determines more precisely the demand for housing, is also growing: in the Netherlands as a whole by 9%, Rotterdam 5% up to 20% in Utrecht.

Mainly young people are flocking to the city to study or work, and because of cities' cultural and recreational offerings. The migration of young people to the cities is partly caused by the higher number of students enrolling in universities and colleges (PBL Netherlands Environmental Assessment Agency 2015). Another reason is that, between 1999 and 2013, the percentage increase in the number of jobs for highly educated persons was many times higher in the cities) than in the rest of the country (Brakman et al. 2015). This has to do with the rise of the service economy and technological developments in logistics and ICT (Parlevliet et al. 2016). In addition, natural growth also plays an important role: the presence of many young people in cities also means that a relatively large number of children are

born. Finally, immigration is increasingly driving population growth in the four major cities, as many immigrants go to the large cities in search of work and education, and to connect with communities of the same origin (PBL Netherlands Environmental Assessment Agency/Statistics Netherlands 2016).

Buy or Rent?

Buying is financially more attractive than renting in the Netherlands. Due to mortgage interest deductibility and the current low interest rates, debt servicing costs are currently lower than rents in the private sector. By way of illustration: middle-income households who own their house spend approximately one fifth of their income on debt service, while middle-income private sector tenants spend a third of their income on rent (Netherlands Bureau for Economic Policy Analysis 2016).

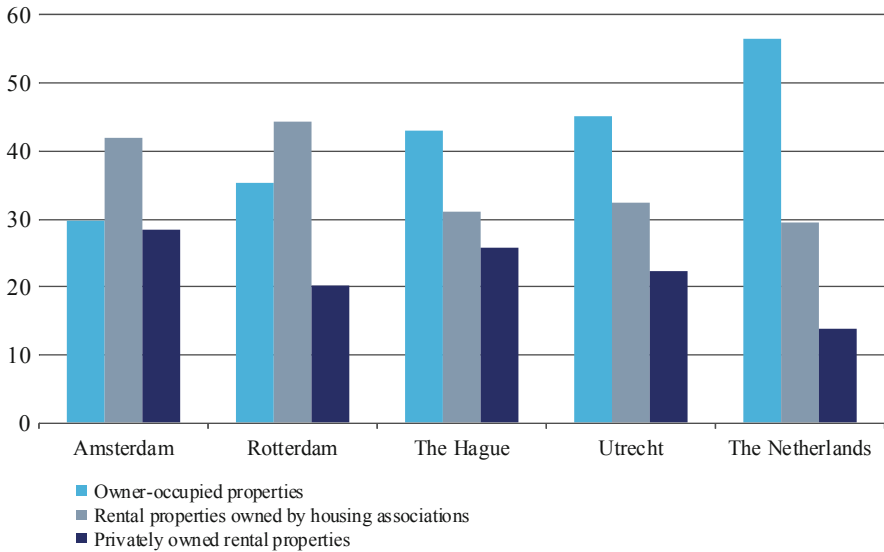
But not everyone can live in an owner-occupied property, so there is also a growing demand for rental housing. After the financial crisis, mortgage lending regulation (LTV and DSTI) has been tightened, which means that homebuyers need to muster more own funds. This can be a hurdle for first time buyers, who usually do not have large savings. A more flexible labor market contributes to this growing demand for private rental housing. In 2009, 5% of all home-seekers wanted a rented home in the private sector; by 2015, the figure had risen to 12% (Ministry of the Interior and Kingdom Relations 2016). This flexibility is particularly important for self-employed people and flexi-workers. Evidence suggests that flexi-workers are indeed more likely to prefer rental housing compared to households in permanent employment (Boumeester and Dol 2016). Finally, the limited accessibility of the social rental segment for middle-income earners is also spurring demand for private sector rentals.

3.2 Housing Supply

The Structure of the Dutch Housing Market

The Dutch social rental sector is relatively large (particularly in major cities), also compared with other European countries. Figure 3.8 shows that the housing association sector makes up around 30% of the total Dutch housing stock, and more than 40% in Amsterdam and Rotterdam; moreover, most privately owned homes are rented out in the regulated segment instead of the private sector. The Dutch social rental sector is one of the largest in Europe and considerably bigger than its counterparts in France (19% of the total), the UK (15%) and Germany (only 5%) (BPD 2016; Whitehead et al. 2016).

The supply of mid-market private rental housing, therefore, falls short of demand in large cities. The non-rent regulated sector throughout the Netherlands has contracted steadily since the 1970s to less than 10% of all homes. This is partly because social rental and owner-occupied housing are subsidized (Whitehead et al. 2016; PBL Netherlands Environmental Assessment Agency 2017). Most Dutch rental housing is owned by housing associations and falls largely within the social



Source: ABF Research (2018)

Fig. 3.8 Housing stock ownership ratio in major cities and the Netherlands (*Percentage of total housing stock, 2017*)

segment. The result is a shortfall in the mid-market segment (monthly rent between EUR 700 and EUR 1000), particularly in Amsterdam and Utrecht (Schilder and Conijn 2015).

Obstacles to Increasing Housing Supply

The price elasticity of the housing supply in the Netherlands is very low in an international perspective (OECD 2011; Swank et al. 2002). Saiz (2010) and Hilber and Vermeulen (2016) demonstrate that geographical restrictions constrain the elasticity of supply, and urbanisation leads to price increases. This is the case in the Randstad conurbation: much of the land surface is already built up, and the expansion of some large cities in the Randstad conurbation is impeded by their location on the coast or near green belts shielded by nationally determined zoning restrictions on construction.

Municipalities lack effective incentives for developing private rental housing, partly because they depend on revenues from land development. This makes municipalities reluctant to grant building permits for land they do not own. Moreover, due to mortgage interest relief, land purchased for owner-occupied properties fetches more than land for rental housing. The land price is often determined on the basis of residual value, i.e. the difference between sale proceeds and construction costs. As buying a house is subsidized, owner-occupied housing fetches a higher price than rental housing and thus (assuming comparable construction costs) land prices are also higher for owner-occupied housing. Municipalities must lower the land price in order to make construction of the non-rent regulated housing profitable. However,

they will not be keen to sell land for less than the relatively high price they paid themselves (PBL Netherlands Environmental Assessment Agency 2017). Moreover, municipalities will also want to keep existing residents satisfied, who may see new-build developments as contrary to their interests: the so-called NIMBY (*not in my backyard*)-effect.

Lastly, new-build development has only slowly recovered since the crisis due to capacity constraints. Both builders and municipalities reduced their capacity after the onset of the crisis. By way of illustration: in 2010 still 377,000 people were employed in the construction sector, but since then nearly 80,000 jobs have been lost leading to a shortage of construction workers.

4 Conclusions and Policy Recommendations

The strong house price rises in major cities signal a three-way divide in the Dutch housing market: an overheated housing market in major cities, a buoyant housing market in surrounding municipalities and a lagging housing market in shrinking regions. Indeed, spillovers from major cities put increasing pressure on satellite communities and cause price rises there. And the departure of young people from shrinking municipalities is creating a supply surplus in peripheral housing markets, worsening their plight.

Middle-income earners threaten to become stranded: living in the city is increasingly inaccessible for these groups. Their income is too high for social housing, they face fierce competition in the private rental market and they are not always able to buy a house in the city. As a result, prospective first-time buyers in particular are more or less forced to choose between relatively expensive rental housing in the city and buying or renting a more affordable place outside the city.

Housing supply shortages abound in and near major Dutch cities, and local governments do not always have the right incentives to ensure the right type of housing to be built. Municipalities are constrained by cuts in planning capacity and focus on owner-occupied instead of rental properties. Housing associations, playing a major role on the Dutch housing market, mainly focus on social housing. Therefore, the necessary increase in private rental housing supply does not take off.

The government can encourage municipalities to provide more private rental housing by setting minimum targets and through arrangements about the inclusion of a minimum percentage of mid-market rental housing in their zoning plans. But this is only possible if the land prices charged by municipalities are sufficiently low to make mid-market rental housing profitable. And to ensure that landlords also receive effective incentives, clear arrangements must be made about long-term rental and rent increase caps. Moreover, housing associations can contribute to a larger supply of private rental housing by renting out their more expensive homes in the private sector.

Finally, accelerated phasing out of mortgage interest relief is vital to ensure a long-term level playing field between owner-occupied and rental properties. Social

rental housing and owner-occupied properties are both subsidized. Private rental housing is not, which makes it relatively expensive and often unaffordable for highly educated young people and middle-income earners (who are also ineligible for the social segment). In addition, mortgage interest relief means that people can pay more for owner-occupied properties than for rental housing. This gives property developers and municipalities an incentive to concentrate on the owner-occupied market. In 2017, the Dutch government has lowered interest deductibility from a marginal rate of 52% to 37%, effective 2023. While this is a necessary first step, a further phasing out of mortgage interest relief would reduce the subsidy on owner-occupation. This would make it more attractive to build for the private rental market and give municipalities an incentive to include mid-market private rental in their zoning plans.

References

- ABF Research. (2018). *Syswov ownership housing stock*. Accessed July 1, 2018, from https://syswov.datawonen.nl/jive?workspace_guid=66f5bd0d-bb2b-4cb4-ab86-ecc24fe6c312
- Boumeester, H., & Dol, K. (2016). Eigenwoningbezit en flexibilisering van de arbeidsmarkt. *Real Estate Research Quarterly*. March.
- BPD. (2016). *Duitsland, Frankrijk, Nederland; Woningmarkten in perspectief 2016*.
- Brakman, S., Garretsen, H., & Marlet, G. (2015). *Het verdwijnende midden in Nederlandse steden? Mogelijke gevolgen van fragmentatie voor de werkgelegenheid*. Pre-advice of the Royal Dutch Economic Association 2015.
- DNB. (2018). *Financial stability report*. Spring.
- European Central Bank. (2011). *Financial stability review*. June.
- European Central Bank. (2015). *Financial stability review*. November.
- European Systemic Risk Board. (2015). *Report on residential real estate and financial stability*. December.
- Hilber, C. A. L., & Vermeulen, W. (2016). The impact of supply constraints on house prices in England. *The Economic Journal*, 126, 358–405.
- Himmelberg, C., Mayer, C., & Sinai, T. (2005). Assessing high house prices: Bubbles, fundamentals and misperceptions. *Journal of Economic Perspectives*, 19(4), 67–92.
- International Monetary Fund. (2016). *Global housing watch report*. November.
- Ministry of the Interior and Kingdom Relations. (2016). *Wonen in beweging, de resultaten van het WoonOnderzoek Nederland 2015*.
- OECD. (2011). Housing and the economy: Policies for renovation. In *Economic policy reforms 2011: Going for growth*.
- Parlevliet, J., Doll, M., Vermeulen, R., & De Winter, J. (2016). Perspectief op groei: de Nederlandse economie in beweging. *DNB Occasional Studies*, 14(4).
- PBL Netherlands Environmental Assessment Agency. (2015). *De stad: magneet, roltrap en spons*.
- PBL Netherlands Environmental Assessment Agency. (2017). *Perspectieven voor het middensegment van de woningmarkt. Verkenning van maatregelen ter bevordering van het aanbod*.
- PBL Netherlands Environmental Assessment Agency/Statistics Netherlands (CBS). (2016). *Regionale bevolkings- en huishoudensprognose 2016–2040: sterke regionale verschillen*.
- Saiz, A. (2010). The geographic determinants of housing supply. *The Quarterly Journal of Economics*, 125(3), 1253–1296.

- Schilder, F. & Conijn, J. (2015). Middeninkomens en het middensegment. De ontbrekende schakel op de woningmarkt. *ASRE Research Paper 2015-10*. Amsterdam: Amsterdam School of Real Estate.
- Swank, J., Kakes, J. I., & Tieman, A. F. (2002). The housing ladder, taxation, and borrowing constraints. *DNB Research Memorandum 2002-9/688*.
- Whitehead, C., Scanlon, K., Monk, S., Tang, C., Haffner, M., Lunde, J., Andersen, M. L., & Voigtlander, M. (2016). *Understanding the role of private renting: A four country case study*. Copenhagen: Boligøkonomisk Videncenter.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution 4.0 International License (<http://creativecommons.org/licenses/by/4.0/>), which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

